1	2	3	4	5	6
		Haryana	1.40	0.15	1.50
		Himachal Pradesh	0.54	0.14	0.91
		Jammu & Kashmir	0.24	0.27	1.71
		Karnataka	0.15	0.11	2.07
		Kerala	1.06	2.49	1.37
		Madhya Pradesh	2.47	3.73	53.28
		Maharastra	2.76	2.76	2.83
		Manipur	0.57	0.59	0.38
		Mizoram	0.34	0.04	0.08
		Nagaland	0.62	0.42	0.11
		Orissa	1.92	0.89	2.47
		Punjab	1.22	0.24	1.51
		Rajasthan	2.26	1.70	2.34
		Sikkim	0.07	2.25	0.03
		Tamil Nadu	2.34	2.35	2.47
		Tripura	0.28	0.28	0.35
		Uttar Pradesh	1.54	1.02	0.65
		West Bengal	1.44	1.42	2.01
		Chandigarh	0.03	0.03	0.03
		Lakshadweep	0.00	0.01	0.00
		Pondicherry	0.03	0.06	0.21
		Daman & Diu	0.01	0.00	0.01
		Jharkhand	0.16	0.18	0.25
		Meghalaya	0.00	0.02	0.00
		Uttranchal	0.04	0.06	0.06

White Paper on Himalayan Glaciers

2648. SHRIMATI MOHS1NA KIDWAI:
SHRIMATI SHOBHANA BHARTIA:

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether Government has decided to bring out a White Paper on the current state of scientific knowledge on the Himalayan Glaciers;

(b) if so, the details thereof;

(c) whether an institutional mechanism has been established to monitor the trends and variability of glaciers and study the impact of changes on the hydrological regime in the region; and

(d) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI JAIRAM RAMESH): (a) and (b) Government has no proposal to bring out a White Paper on the current state of scientific knowledge on the Himalayan Glaciers. However, a Discussion Paper on Himalayan Glacier has been published.

(c) and (d) A new research centre on Himalayan Glaciology has been established at Wadia Institute of Himalayan Geology, Dehradun. Guidelines and best practices for Governance for Sustaining Himalayan Eco-system (G-SHE) has been developed and shared with all State Governments in the Himalayan region.

Restoration of mangrove forests

2649. SHRI S.S. AHLUWALIA: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether Government is aware that mangrove forests in most of the places along the east coast are being destroyed especially due to damming of rivers in course of their flowing into the Bay of Bengal, in an *adhoc* and unplanned manner;

(b) if so, the steps being taken, if any, for restoration and strengthening mangrove forests along the east coast line;

(c) whether Government has carried out any survey of all mangrove forests, in order to identify those which are adversely affected due to damming of rivers; and

(d) if so, the findings thereof; and if not, the reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI JAIRAM RAMESH): (a) to (d) Mangroves of the East Coast of India are in the deltaic regions of river systems such as Cauvery in Tamil Nadu; Krishna and Godavari in Andhra Pradesh; Brahmani, Baitarani and Mahanadi in Orissa; and Ganges in West Bengal. There is no study which singles out damming of rivers leading to destruction of mangroves. However, some studies conducted by M.S. Swaminathan Researh Foundation indicate a change in mangrove species composition in the East Coast region due to reduction in periodicity and quantity of freshwater reaching the mangrove environment as mangroves require an optimal mix of fresh and salt water for growth and perpetuation. As per the biennial assessment done by Forest Survey of India since 1987 using remote sensing, the mangrove forests in the country have not undergone any significant change. Most States have registered an increase in mangrove cover. Details are given in the Statement *(See* below).

According to India State of Forest Report 2009, the mangrove cover in the country is 4,639 sq km. Compared with 2005 assessment, there has been an increase of 58 sq km in mangrove cover. This is mainly because of the plantations and protection measures in the States of Gujarat, Orissa, Tamil Nadu and West Bengal. Decrease in mangrove cover in Andamans & Nicobar Islands is attributed to after effects of tsunami.